

MEMORANDUM

DATE: June 20, 2014

TO: Rose Longoria, Yakama Nation Fisheries

FROM: Bob Dexter, Ridolfi Inc.

SUBJECT: Comments on Draft Introduction to the Portland Harbor Feasibility Study

General Comments:

Overall, the report requires more thorough editing. The report included overuse of "jargon" and unexplained acronyms that would be difficult for a non-technical reader to understand. For example, chemicals are called COCs (but only once); in the human health risk assessment summary, the terms "risk," "hazard," "point of departure" and "HI" are used without explanation; while "HQ" and "AOC" are used in the ecological RA summary. Similarly, much of the information is presented with limited context or explanation—"this substance was found here"—without answering the "so what" question. The report could probably provide less information, but provide a summary of the RI that better conveys the threat to humans and natural resources and explains the need to remediate the contaminated sediments.

The information in a number of sections could be better presented in tables or figures, supported by general summaries in the text; for example, the information on chemicals of concern and their distribution, groundwater plumes, and contamination in the river banks.

Specific Comments:

Page 1-3. Section 1.2.1. Is it true that RMs 3 to 10 are the primary depositional areas in the Willamette, or just in the lower Willamette? Please clarify.

Page 1-4. Last paragraph. Please note that the LWR is also an important rearing site for anadromous fish, not just a migratory corridor.

Page 1-11-1-14. Section 1.2.3.1. Please verify the conclusions made for most chemicals in this section that surface concentrations are lower than subsurface concentrations. While summary analyses, such as those presented in the RI in Figure 5.1-33, show river-mile average concentrations lower in the surface than subsurface, those data may be biased by the greater number of surface samples collected in relatively clean areas. At one of the technical meetings, LWG presented comparisons of surface and deeper concentrations on a core-by-core basis. I believe those data did not support a strong subsurface dominance, and apologize that I don't have those data handy. Further, even using the potentially biased average data, some contaminants, such as PCDD/Fs, appear higher in the surface than the subsurface, based on Figure 5.1-39 of the RI.



Page 1-1. Second paragraph. Please add the Yakama Nation and other stakeholders to the last sentence describing the support to EPA.

Page 1-10. Section 1.2.3. First paragraph. The last sentence needs more information. It is unclear what the terms "were identified" mean in this context. For example, does it mean that the contaminants were detected most frequently and exceeded the screening criteria by more than others? It would help to understand why the list includes these 32 contaminants (and no more or less). Section 1.2.5.2, states that 93 contaminants (reduced to 66) exceeded risk thresholds. These numbers seem inconsistent. Finally, note that the table on page 1-14, Surface Water, includes the term COC, with no definition.

Page 1-11-1-14. Section 1.2.3.1. Please provide more information regarding why it is important that concentrations in the sediments exceeded the numeric concentration provided. For example, the PCB distribution is based on a comparison to 200 ug/kg, but this concentration does not appear to be based on a PRG. The concentrations used to evaluate other substances are similarly unsubstantiated. Why are the sediment PRGs not use here? Please include Figures showing the distribution of the 14 indicator substances using an appropriate risk threshold to show areas with of potential risk. The present discussion is too limited to provide much meaningful information.

Page 1-15. Section 1.2.3.2. Last paragraph. Please remove "potential" from the last sentence in this section and paragraph. These data *do* reflect high discharges to the Columbia River.

Page 1-15—1-19. Section 1.2.3.3. As noted earlier, the groundwater section seems particularly appropriate for presenting results in a table on in a figure. Groundwater is not a direct focus of the FS, but this section is nearly twice as long as the sediment section. Further, it is difficult to determine how the information is intended to be used vis-à-vis the remedial activities in the river. The implication from the data presented is that there is a lot of contaminated groundwater flowing to the river, but that information is not compared to any risk factor or to contamination in other media. It would be helpful to perhaps add a discussion of the TZW measurements to compare to these plumes, especially since the TZW is not even discussed in this current draft.

Page 1-22. Section 1.2.5. Please note that the risk assessments are summarized as Sections 8 and 9 of the RI.